



Michigan BRFS

# MICHIGAN BRFSS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH

## Highlights from the 2007 Michigan BRFS

The 2007 Michigan Behavioral Risk Factor Survey (MiBRFS) was conducted for MDCH by the Office of Survey Research, Institute for Public Policy and Social Research at Michigan State University as part of the national Behavioral Risk Factor Surveillance System (BRFSS). The total sample size was 7,505, with three splits of state-added questions with sample sizes of 3,026, 3,016, and 1,463, respectively. The 2007 MiBRFS had a response rate of 53%, which was once again higher than the median of all participating states and territories (50.58%).<sup>1</sup>

The table to the right presents selected preliminary estimates from the 2007 MiBRFS. Nearly 15% (14.8%) of Michigan adults were estimated to be in fair or poor health, 6.6% to be dissatisfied or very dissatisfied with their life, 22.7% to have a disability, and 28.4% to have a body mass index of 30 or greater.

Questions about high blood pressure and blood cholesterol have been included on the MiBRFS in odd-numbered years. In 2007, 29.0% of Michigan adults were estimated to have ever been diagnosed with high blood pressure, 79.4% (95% CI = 76.9-81.6) of whom were taking medication for high blood pressure. Greater than eight-in-ten Michigan adults (82.5% [80.9-83.9]) were estimated to have ever had their cholesterol checked, and 78.5% (76.9-80.0) had it checked within the previous five years. Among those who had ever had it checked, 39.9% had ever been diagnosed with high blood cholesterol.

For the first time ever, questions on Hepatitis B vaccination and risk factors were included on the 2007 MiBRFS. Fewer than one-third (30.9%) of Michigan adults were estimated to have ever been vaccinated for Hepatitis B. The proportion vaccinated decreased with age from 59.9% (53.4-66.1) of 18-24 year olds to 6.7% (5.1-8.7) of those aged 75 years and older, and was higher among females compared with males (33.8% [31.9-35.7] vs. 27.9% [25.5-30.4]). A single question was asked about engaging in a list of behaviors related to increased risk of acquiring Hepatitis B. From this question, 5.4% (4.6-6.3) of adults were estimated to be at risk for Hepatitis B infection. Although a higher proportion of those at-risk for Hepatitis B had been vaccinated compared with those not at risk (41.1% [33.5-49.0] vs. 30.4% [28.9-32.0]), nearly half (48.9% [41.2-56.6]) of those at-risk had not been vaccinated and 10.1% (7.0-14.2) did not know.

It was also estimated that, in 2007, 31.7% of Michigan adults had arthritis, 9.5% had asthma, 9.0% had diabetes, and 7.7% had osteoporosis.

**Table. Preliminary Estimates from 2007 Michigan Behavioral Risk Factor Survey**

	%	95% CI
General health fair or poor	14.8	13.8-15.8
Dissatisfaction with life	6.6	5.9-7.4
Has a disability	22.7	21.5-23.9
Obese (BMI ≥ 30)	28.4	27.1-29.9
Fruit & vegetables < 5 x/day	78.7	77.5-80.0
Cigarette smoking	21.1	19.8-22.5
Heavy drinking	6.1	5.3-6.9
Binge drinking	18.4	17.1-19.8
Ever told high blood pressure	29.0	27.8-30.0
Ever told high blood cholesterol	39.9	38.4-41.4
No health insurance (18-64 yrs)	14.4	13.1-15.8
No routine checkup in past year	30.5	29.0-32.0
Vaccinated for flu in past year (≥65)	70.7	68.4-72.8
Ever vaccinated for pneumonia (≥65)	63.3	60.9-65.7
Ever vaccinated for Hepatitis B	30.9	29.4-32.5
Ever had HIV test (18-64 yrs)	38.5	36.7-40.3
Lifetime asthma	14.7	13.6-15.8
Current asthma	9.5	8.6-10.5
Doctor-diagnosed arthritis	31.7	30.4-33.0
Ever had a heart attack	4.8	4.4-5.4
Ever had angina or CHD	4.9	4.5-5.5
Ever had a stroke	2.8	2.4-3.2
Ever diagnosed with diabetes	9.0	8.3-9.7
Ever diagnosed with osteoporosis	4.7	4.1-5.5

### MiBRFSS News

- Submission deadline for requests to include questions on the 2009 MiBRFS is June 25, 2008. The 2009 MiBRFS Add-On Solicitation meeting will be held June 18, 2008 from 1:30-3:30 in Capitol View Building Conference Room C. For more information, please contact Chris Fussman at [fussmanc@michigan.gov](mailto:fussmanc@michigan.gov) or 517-335-8144.
- Preliminary 2007 estimates are now available on our website at [www.michigan.gov/brfs](http://www.michigan.gov/brfs).
- Did you miss an issue of *Michigan BRFSS Surveillance Brief*? Back issues are also available on our website.
- Final estimates from the 2007 MiBRFS will be available in our annual MiBRFS report, due out by the end of the summer.

## Trends in Physical Activity

Two measures from the BRFSS are used to monitor the level of physical activity among Michigan adults. Physical inactivity has been measured since 1988 using the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" Overall, the prevalence of physical inactivity has declined from 32.4% in 1990 to 20.9% in 2007, however, most of this decline occurred in the early 1990's (Figure 1).

The second physical activity surveillance measure is "regular physical activity," which is defined by the *Healthy People 2010* objective 22-2<sup>2</sup> to include engaging in moderate physical activity for at least 30 minutes five or more days a week or vigorous activity for at least 20 minutes three or more days a week. The MiBRFS included questions on moderate and vigorous physical activity in 2001, 2002, 2003, 2005, and 2007.

The prevalence of regular physical activity among Michigan adults increased 5.8 percentage points between 2001 and 2007, from 44.8% to 50.6% (Figure 2). This increase was larger than the 3.1 percentage point increase observed in the median prevalence among all participating states and territories over the same time period. The 2007 Michigan prevalence of regular physical activity was similar to the US median (49.2%).

In 2007, the prevalence of regular physical activity increased with age and household income, was higher among whites than blacks, and was similar by sex. When the trend in this indicator between 2001 and 2007 was examined more closely by the four major race-sex groups in Michigan, the age-adjusted prevalence of regular physical activity increased 4.8 and 6.8 percentage points among white males and females, respectively, and 13.2 percentage points among black females. There was no significant change among black males. At the national level, significant increases in the prevalence of regular physical activity were also observed for these four sex-race groups between 2001 and 2005.<sup>3</sup>

Although there continues to be disparity by race in the prevalence of regular physical activity, black females have made significant progress towards attaining regular physical activity in Michigan as well as in the U.S.

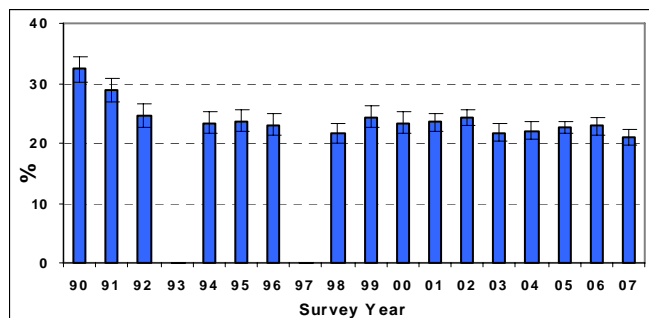
### References

<sup>1</sup>Behavioral Surveillance Branch, CDC. 2007 Behavioral Risk Factor Surveillance System Summary Data Quality Report. [http://www.cdc.gov/brfss/technical\\_infodata/quality.htm](http://www.cdc.gov/brfss/technical_infodata/quality.htm). Accessed 4/29/2008.

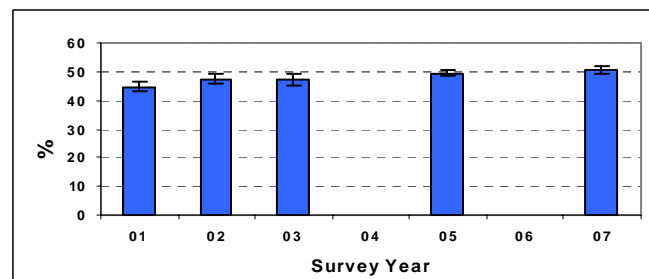
<sup>2</sup>CDC. *Healthy People 2010 Midcourse Review*. <http://www.healthypeople.gov/Publications>. Accessed 5/6/2007.

<sup>3</sup>CDC. Prevalence of regular physical activity among adults—United States, 2001 and 2005. *MMWR* 2007;56:1209-12.

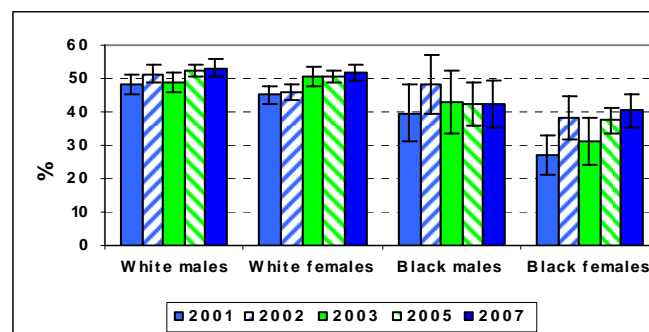
**Figure 1. Prevalence of Physical Inactivity  
Michigan BRFSS 1990-2007**



**Figure 2. Prevalence of Regular Physical Activity  
Michigan BRFSS 2001-2007**



**Figure 3. Age-Adjusted Prevalence of Regular Physical Activity by Sex-Race Groups, MI BRFSS 2001-2007**



## The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS)

The MiBRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC. The annual Michigan Behavioral Risk Factor Surveys (MiBRFS) follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a poststratification weighting factor that adjusts for the sex, age, and race distribution of the adult Michigan population. All analyses are performed using SAS-callable SUDAAN® to account for the complex sampling design.

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